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McKay

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(54) **DEMINERALIZED BONE MATRIX WITH
IMPROVED OSTEOINDUCTIVITY**

(71) Applicant: **Warsaw Orthopedic, Inc.**, Warsaw, IN
(US)

(72) Inventor: **William F. McKay**, Memphis, TN (US)

(73) Assignee: **Warsaw Orthopedic, Inc.**, Warsaw, IN
(US)

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(58) **Field of Classification Search**

None

See application file for complete search history.

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Primary Examiner — Chris R Tate

Assistant Examiner — Douglas F White

(57) **ABSTRACT**

Methods of making and osteoinductive compositions are
provided. The method includes mixing isolated periosteum
tissue with a demineralized bone matrix to form the osteoinduc-
tive composition. The periosteum tissue is isolated from
the surface of large bones such as femur, tibia, humerus or
a mixture thereof. The demineralized bone matrix can
include a plurality of surface demineralized or fully demin-
eralized bone fibers, bone chips, bone particles or mixtures
thereof. In the osteoinductive composition the substantially
isolated periosteum tissue is from about 0.5% wt. to about
10% wt. A method for repairing a bone defect is also
provided. The method of treatment includes applying to the
bone defect a substantially effective amount of a mixture of
isolated periosteum tissue and demineralized bone matrix.

12 Claims, No Drawings